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EXAMINER	
TRAN, PHUC H	
ART UNIT	**PAPER NUMBER**
2616	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)
	10/804,528	TYAN ET AL.
	Examiner	Art Unit
	PHUC H. TRAN	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/14/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-54 of Copending applicant number 10/804,550 in view of Karbowiak et al. (4,663,748).

For claims 1-34, the 1-54 of Copending applicant number 10/804,550 discloses a local area network comprising: a data interface operable to receive data for transmission to a destination node (see claim 1, line 2 of Patent '50); a buffer operable to store the data (see claim 1, line 3 of Patent '50); a transmitting unit operable to couple to an optical transmission medium having a plurality of data channels and to selectively transmit optical signals on the data channels (see claim 1, lines 4-6 of Patent '50); and a controller operable to receive a token authorizing transmission on one of the data channels, to generate a transmission control message identifying the destination node and the authorized data channel, to communicate the transmission control message for receipt by the destination node, to transmit the data on the authorized data channel using the transmitting unit after communicating the transmission control message, and to communicate the token to a next node(see claim 1, lines 7-12 of Patent '50);

wherein the controller is further operable to determine timing information associated with transmission of the data, to identify the timing information in the transmission control message, and to transmit the data in accordance with the timing information (see claim 2, lines 1-4 of Patent '50);

wherein the controller is further operable to communicate the token to the next node before transmission of the data on the authorized data channel (see claim 3, lines 1-3 of Patent '50);

wherein the controller is further operable to determine whether to delay communicating the token and to communicate the token to the next node after a delay in response to determining to delay communicating the token (see claim 4, lines 1-4 of Patent '50);

wherein the transmitting unit includes a tunable laser, and the controller is further operable to tune the laser to transmit first optical signals associated with the data on the authorized data channel (see claim 5, lines 1-3 of Patent '50);

wherein the buffer maintains a plurality of queues, each queue associated with one of a plurality of remote nodes, and wherein the buffer is operable to store the data in a selected one of the queues that is associated with the destination node (see claim 6, lines 1-4 of Patent '50);

wherein the controller is further operable to receive a plurality of tokens, each token authorizing transmission on a separate data channel, to generate a plurality of transmission control messages, each transmission control message identifying the destination node and one of the separate authorized data channels, to communicate the transmission control messages for receipt by the destination node, to divide the data into a plurality of portions, to transmit each portion on a separate one of the authorized data channels, and to communicate the tokens to the next node (see claim 7, lines 1-8 of Patent '50);

wherein: the data interface is further operable to receive second data for transmission to a second destination node (see claim 8, lines 2-3 of Patent '50); the buffer is further operable to store the second data (see claim 8, line 4 of Patent '50); and the controller is further operable to determine that the token affords time for a second transmission, to generate a second transmission control message identifying the second destination node and the authorized data channel, to

communicate the second transmission control message for receipt by the second destination node, and to transmit the second data on the authorized data channel using the transmitting unit after communicating the second transmission control message (see claim 8, lines 5-10 of Patent '50);

wherein the transmission control message further identifies a size of the data (see claim 9, lines 1-2 of Patent '50);

further comprising a control interface operable to couple to a control channel, the control interface operable to receive the token on the control channel, to transmit the token on the control channel, and to communicate the transmission control message on the control channel (see claim 10, lines 1-4 of Patent '50);

further comprising: a receiving unit operable to couple to the optical transmission medium and to selectively receive second optical signals on the data channels (see claim 11, lines 2-3 of Patent '50); and an incoming buffer operable to store incoming data (see claim 11, line 4 of Patent '50); wherein the data interface is further operable to transmit the incoming data to a local destination (see claim 11, lines 5-6 of Patent '50); and wherein the controller is further operable to receive a second transmission control message, identifying a second destination node and a second authorized data channel, to determine whether the optical node is the second destination node, and to receive the second optical signals on the second authorized data channel using the receiving unit after determining that the optical node is the second destination node (see claim 11, lines 7-11 of Patent '50);

wherein the receiving unit includes a tunable filter, and the controller is further operable to tune the filter to receive the second optical signals on the second authorized data channel (see claim 12, lines 1-3 of Patent '50);

wherein the controller is further operable to store passing data in the buffer and to retransmit the passing data using the transmitting unit upon detection of an error (see claim 13, lines 1-3 of Patent '50);

Note: (see the 1-54 of Copending applicant number 10/804,550).

For claims 1-34, the claims 1-54 of the copending application number 10/804,550 disclose all the subject matter of the claimed invention with the exception of transmitting the second token to the next node in a communication network. Karbowiak et al. from the same or similar field of endeavor teaches a provision of the transmitting the second token to the next node (see column 11 lines 50-60). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the transmitting the second token to the next node as taught by Karbowiak et al. in the communication of the Claims 1-54 of the copending application number 10/804,550. The transmitting the second token to the next node can be modified/implemented into the Claims 1-54 of the copending application number 10/804,550 since Claims 1-54 of the copending application number 10/804,550 do teach a controller for ring topology. The motivation for using the transmitting the second token to the next node as taught by Karbowiak et al. in the communications network of Claims 1-54 of the copending application number 10/804,550 being that it reduces congestion traffic.

2. Claims 1,9,17,25,33, and 34 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,8,15,22,29,and 31 of copending Application No. 10/804,555 in view of Karbowiak et al.

Note: (see the claims 1,8,15,22,29,and 31 of copending Application No. 10/804,555).

Applicant's Claims 1 merely broaden the scope of the copending application Claims 1, 3 and 10 by eliminating the elements: transmission control .It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re karlson, 136 UPSQ 184 (CCPA). Also note Ex Parte Raine, 186 USPQ 375 (bd. App. 1969); omission of a reference element whose function is not needed would have been obvious to one skilled in the art.

For claims 1,9,17,25,33, and 34 , the claims 1,8,15,2,29,and 31 of the copending application number 10/804,555 disclose all the subject matter of the claimed invention with the exception of transmitting the second token to the next node in a communication network. Karbowiak et al. from the same or similar field of endeavor teaches a provision of the transmitting the second token to the next node (see column 11 lines 50-60). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the transmitting the second token to the next node as taught by Karbowiak et al. in the communication of the claims 1,8,15,2,29,and 31 of the copending application number 10/804,555. The transmitting the second token to the next node can be modified/implemented into the claims 1,8,15,2,29,and 31 of the copending application number 10/804,555 since the claims 1,8,15,2,29,and 31 of the copending application number 10/804,555 do teach a controller for ring topology. The motivation for using the transmitting the second token to the next node as taught by Karbowiak

et al. in the communications network of the claims 1,8,15,2,29,and 31 of the copending application number 10/804,555 being that it reduces congestion traffic.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 7-14,17-21,25-30, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Vesel et al. (4,993,025).

- With respect to claims 1-6, 7-14,17-22,25-30, and 33, Vesel et al. discloses a high efficiency image data transfer network comprising: an optical node comprising: a data interface (see box 52 in figure 2) operable to receive data for transmission to a destination node (see box 72 in figure 2); a buffer operable to store the data (see boxes 37 and 70 in figure 2); a transmitting unit operable to couple to an optical transmission medium (see column 8 line 12) having a plurality of data channels and to selectively transmit optical signals on the data channels (see column 8 lines 20-24); and a controller operable to receive a first token authorizing transmission on one of the data channels, to generate a transmission control message identifying the destination node and the authorized data channel, to communicate the transmission control message to a next node, to communicate a second token to the next node authorizing secondary transmissions on the authorized data channel, to transmit the data on the authorized data channel using the transmitting unit after communicating the transmission control message, and to

communicate the first token to the next node after communicating the second token to the next node (see column 6 lines 39-60);

wherein the optical node is one of a plurality of optical nodes on an optical communication ring and the second token authorizes other optical nodes on the optical communication ring to transmit the secondary transmissions on the authorized data channel in a section of the authorized data channel and at a time so as not to conflict with transmission of the data by the optical node (see time base in figure 3A) ;

wherein the controller is further operable to communicate the second token to the next node before beginning transmission of the data on the authorized data channel, and to communicate the first token to the next node after completing transmission of the data on the authorized data channel(see column 6 lines 39-60);

wherein the controller is further operable to communicate the first token to the next node after a delay, wherein the delay prevents a collision of a first and second transmission on an optical communication ring(see time base in figure 3A);

wherein the controller is further operable to communicate the first token to the next node after a delay, wherein the delay is equal to a transmission allocation associated with the authorized data channel(see time base in figure 3A);

wherein the transmitting unit includes a tunable laser, and the controller is further operable to tune the laser to transmit first optical signals associated with the data on the authorized data channel (see column 2 line 58);

further comprising: a receiving unit operable to couple to the optical transmission medium and to selectively receive second optical signals on the data channels; and an incoming buffer operable to store incoming data(see column 8 line 12); wherein the data interface is further operable to transmit the incoming data to a local destination; and wherein the controller is further operable to receive a second transmission control message identifying a second destination node and a second authorized data channel, to determine whether the optical node is the second destination node, and to receive the second optical signals on the second authorized data channel using the receiving unit after determining that the optical node is the second destination node(see column 6 lines 39-60);

wherein the receiving unit includes a tunable filter, and the controller is further operable to tune the filter to receive the second optical signals on the second authorized data channel(see column 2 line 58);

a plurality of optical communication nodes(see column 6 lines 39-60); optical transmission media interconnecting the optical communication nodes (see column 2 line 58), the optical transmission media having a plurality of data channels; and a plurality of first logical tokens corresponding to the data channels; wherein each of the optical communication nodes is operable to: receive data for transmission to a destination one of the optical communication nodes; receive one of the first logical tokens; identify one of the data channels associated with the logical token(see column 6 lines 39-60); schedule a data transmission using the identified data channel; communicate a transmission control message identifying the scheduled data transmission; communicate a second logical token to a next optical communication node, the second logical token authorizing a secondary data transmission using the identified data channel; and transmit

the data to the destination optical communication node using the identified data channel after communicating the second logical token to the next optical communication node(see column 6 lines 39-60);

wherein the optical communication system is an optical communication ring and the second token authorizes optical communication nodes other than an optical communication node that generates the second token to transmit the secondary data transmissions on the identified data channel in a section of the identified data channel and at a time so as not to conflict with transmission of the data by the optical communication node that generates the second token(see column 6 lines 39-60);

wherein each of the optical communication nodes is further operable to communicate the second logical token to the next optical communication node before beginning transmission of the data on the identified data channel, and to communicate the first logical token to the next optical communication node after completing transmission of the data on the identified data channel(see column 6 lines 39-60);

wherein each of the optical communication nodes is further operable to communicate the first logical token to the next optical communication node after a delay, wherein the delay prevents a collision of a first and second transmission on an optical communication ring(see column 6 lines 39-60);

wherein each of the optical communication nodes is further operable to communicate the first logical token to the next optical communication node after a delay, wherein the delay is equal to a transmission allocation associated with the identified data channel(see time base in figure 3A);

wherein each of the optical communication nodes includes a transmitting unit that includes a tunable laser, and each of the optical communication nodes is further operable to tune the laser to transmit first optical signals associated with the data on the identified data channel (see column 2 line 58);

receiving data for transmission to a destination node; storing the data in a buffer; coupling to an optical transmission medium having a plurality of data channels; receiving a first token authorizing transmission on one of the data channels; generating a transmission control message identifying the destination node and the authorized data channel; communicating the transmission control message to a next node(see column 6 lines 39-60); communicating a second token to the next node authorizing secondary transmissions on the authorized data channel; transmitting the data on the authorized data channel after communicating the transmission control message; and communicating the first token to the next node after communicating the second token to the next node(see column 6 lines 39-60);

wherein the second token authorizes optical nodes other than an optical node that generates the second token to transmit the secondary transmissions on the authorized data channel in a section of the authorized data channel and at a time so as not to conflict with transmission of the data by the optical node that generates the second token(see time base in figure 3A) and (see column 6 lines 39-60);

wherein communicating the second token to the next node occurs before beginning transmission of the data on the authorized data channel, and communicating the first token to the next node

occurs after completing transmission of the data on the authorized data channel(see column 6 lines 39-60);

further comprising determining whether to delay communicating the first token and delaying communication of the first token to the next node in response to determining to delay communicating the first token, wherein the delay prevents a collision of a first and second transmission on an optical communication ring(see time base in figure 3A);

further comprising determining whether to delay communicating the first token and delaying communication of the first token to the next node in response to determining to delay communicating the first token, wherein the delay is equal to a transmission allocation associated with the authorized data channel(see column 6 lines 39-60);

wherein transmitting the data on the authorized data channel includes tuning a laser to transmit first optical signals associated with the data on the authorized data channel (see column 2 line 58);

Logic for token-controlled data transmission, the logic encoded in media and operable when executed to: receive data for transmission to a destination node; store the data in a buffer; couple to an optical transmission medium having a plurality of data channels; receive a first token authorizing transmission on one of the data channels; generate a transmission control message identifying the destination node and the authorized data channel; communicate the transmission control message to a next node; communicate a second token to the next node authorizing secondary transmissions on the authorized data channel; transmit the data on the authorized data channel after communicating the transmission control message; and communicate the first token

to the next node after communicating the second token to the next node (see column 6 lines 39-60);

wherein the second token authorizes optical nodes other than an optical node that generates the second token to transmit the secondary transmissions on the authorized data channel in a section of the authorized data channel and at a time so as not to conflict with transmission of the data by the optical node that generates the second token(see column 6 lines 39-60);

further operable when executed to communicate the second token to the next node before beginning transmission of the data on the authorized data channel, and communicate the first token to the next node after completing transmission of the data on the authorized data channel(see column 6 lines 39-60);

further operable when executed to determine whether to delay communicating the first token and delay communication of the first token to the next node in response to determining to delay communicating the first token, wherein the delay prevents a collision of a first and second transmission on an optical communication ring(see column 6 lines 39-60);

further operable when executed to determine whether to delay communicating the first token and delay communication of the first token to the next node in response to determining to delay communicating the first token, wherein the delay is equal to a transmission allocation associated with the authorized data channel(see column 6 lines 39-60);

further operable when executed to tune a laser to transmit first optical signals associated with the data on the authorized data channel(see column 2 line 58); and

means for receiving data for transmission to a destination node; means for storing the data in a buffer (see box 37 and 70 in figure 2); means for coupling to an optical transmission medium (see column 8 line 12)having a plurality of data channels; means for receiving a first token authorizing transmission on one of the data channels(see column 8 line 20-24); means for generating a transmission control message identifying the destination node and the authorized data channel; means for communicating the transmission control message to a next node(see column 6 lines 39-60); means for communicating a second token to the next node authorizing secondary transmissions on the authorized data channel; means for transmitting the data on the authorized data channel after communicating the transmission control message; and means for communicating the first token to the next node after communicating the second token to the next node(see column 6 lines 39-60).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Howe (2005/0058149) is cited to show a system which is considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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